#9188

PCT

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RAW SEQUENCE LISTING　　　　　　　　　DATE: 10/02/2002
PATENT APPLICATION:　US/10/019,906A　　TIME: 09:40:40

Input Set : N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

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 1 <110> APPLICANT: Richardson, Peter
 2       Cox, Peter
 3 <120> TITLE OF INVENTION: A Method for Amplifying Low Abundance Nucleic Acid Sequences
and Means
 4       for Performing Said Method
 5 <130> FILE REFERENCE: GJE-83
 6 <140> CURRENT APPLICATION NUMBER: US/10/019,906A
 7 <141> CURRENT FILING DATE: 2002-08-23
 8 <150> PRIOR APPLICATION NUMBER: US 60/144,666
 9 <151> PRIOR FILING DATE: 1999-07-19
10 <160> NUMBER OF SEQ ID NOS: 53
11 <170> SOFTWARE: PatentIn version 3.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 20
15 <212> TYPE: DNA
16 <213> ORGANISM: Artificial Sequence
17 <220> FEATURE:
18 <223> OTHER INFORMATION: oligonucleotide
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23 <211> LENGTH: 21
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <223> OTHER INFORMATION: oligonucleotide
28 <400> SEQUENCE: 2
29       ctgcatctat ctagtacgcg t                                        21
31 <210> SEQ ID NO: 3
32 <211> LENGTH: 38
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: oligonucleotide
37 <220> FEATURE:
38 <221> NAME/KEY: misc_feature
39 <222> LOCATION: (38)..(38)
40 <223> OTHER INFORMATION: n = a, c, g, or t.
41 <400> SEQUENCE: 3
42       ctctcaagga tcttaccgct tttttttttt tttttvn                       38
44 <210> SEQ ID NO: 4
45 <211> LENGTH: 30
46 <212> TYPE: DNA
47 <213> ORGANISM: Artificial Sequence
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W--> (line 42)

RAW SEQUENCE LISTING   DATE: 10/02/2002
PATENT APPLICATION: US/10/019,906A   TIME: 09:40:40

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        49 <223> OTHER INFORMATION: oligonucleotide
        50 <220> FEATURE:
        51 <221> NAME/KEY: misc_feature
        52 <222> LOCATION: (21)..(25)
        53 <223> OTHER INFORMATION: n = a, c, g, or t.
        54 <400> SEQUENCE: 4
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        57 <210> SEQ ID NO: 5
        58 <211> LENGTH: 30
        59 <212> TYPE: DNA
        60 <213> ORGANISM: Artificial Sequence
        61 <220> FEATURE:
        62 <223> OTHER INFORMATION: oligonucleotide
        63 <220> FEATURE:
        64 <221> NAME/KEY: misc_feature
        65 <222> LOCATION: (21)..(25)
        66 <223> OTHER INFORMATION: n = a, c, g, or t.
        67 <400> SEQUENCE: 5
W--> 68       ctgcatctat ctaatgctcc nnnnncgaca                       30
        70 <210> SEQ ID NO: 6
        71 <211> LENGTH: 30
        72 <212> TYPE: DNA
        73 <213> ORGANISM: Artificial Sequence
        74 <220> FEATURE:
        75 <223> OTHER INFORMATION: oligonucleotide
        76 <220> FEATURE:
        77 <221> NAME/KEY: misc_feature
        78 <222> LOCATION: (21)..(25)
        79 <223> OTHER INFORMATION: n = a, c, g, or t.
        80 <400> SEQUENCE: 6
W--> 81       ctgcatctat ctaatgctcc nnnnncgtac                       30
        83 <210> SEQ ID NO: 7
        84 <211> LENGTH: 30
        85 <212> TYPE: DNA
        86 <213> ORGANISM: Artificial Sequence
        87 <220> FEATURE:
        88 <223> OTHER INFORMATION: oligonucleotide
        89 <220> FEATURE:
        90 <221> NAME/KEY: misc_feature
        91 <222> LOCATION: (21)..(25)
        92 <223> OTHER INFORMATION: n = a, c, g, or t.
        93 <400> SEQUENCE: 7
W--> 94       ctgcatctat ctaatgctcc nnnnnatgcg                       30
        96 <210> SEQ ID NO: 8
        97 <211> LENGTH: 19
        98 <212> TYPE: DNA
        99 <213> ORGANISM: Artificial Sequence
       100 <220> FEATURE:
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RAW SEQUENCE LISTING   DATE: 10/02/2002
PATENT APPLICATION: US/10/019,906A   TIME: 09:40:40

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Output Set: N:\CRF4\10022002\J019906A.raw

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102 <400> SEQUENCE: 8
103        cactggtacg tgggtgagg                                    19
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106 <211> LENGTH: 22
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: oligonucleotide
111 <400> SEQUENCE: 9
112        tttgacatga tacagggact gc                                22
114 <210> SEQ ID NO: 10
115 <211> LENGTH: 18
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: oligonucleotide
120 <400> SEQUENCE: 10
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123 <210> SEQ ID NO: 11
124 <211> LENGTH: 20
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: oligonucleotide
129 <400> SEQUENCE: 11
130        acacctcaaa ccactcccag                                   20
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133 <211> LENGTH: 20
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: oligonucleotide
138 <400> SEQUENCE: 12
139        actgccaaga ctgagtggct                                   20
141 <210> SEQ ID NO: 13
142 <211> LENGTH: 22
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:
146 <223> OTHER INFORMATION: oligonucleotide
147 <400> SEQUENCE: 13
148        aatggtttga tgggtaaaat gc                                22
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151 <211> LENGTH: 20
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: oligonucleotide
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          RAW SEQUENCE LISTING              DATE: 10/02/2002
          PATENT APPLICATION:  US/10/019,906A     TIME: 09:40:40

          Input Set : N:\Crf4\09232002\J019906.raw
          Output Set: N:\CRF4\10022002\J019906A.raw

156 <400> SEQUENCE: 14
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160 <211> LENGTH: 19
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: oligonucleotide
165 <400> SEQUENCE: 15
166       accagggaca ccttgcttc                                     19
168 <210> SEQ ID NO: 16
169 <211> LENGTH: 19
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: oligonucleotide
174 <400> SEQUENCE: 16
175       tctgaccaac aaagctggc                                     19
177 <210> SEQ ID NO: 17
178 <211> LENGTH: 21
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: oligonucleotide
183 <400> SEQUENCE: 17
184       tggaaggaaa ggcagtagtc a                                  21
186 <210> SEQ ID NO: 18
187 <211> LENGTH: 20
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: oligonucleotide
192 <400> SEQUENCE: 18
193       ggggacagca actcagaaaa                                    20
195 <210> SEQ ID NO: 19
196 <211> LENGTH: 20
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: oligonucleotide
201 <400> SEQUENCE: 19
202       cagctctcca agtttccacc                                    20
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205 <211> LENGTH: 19
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: oligonucleotide
210 <400> SEQUENCE: 20
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RAW SEQUENCE LISTING   DATE: 10/02/2002
PATENT APPLICATION: US/10/019,906A   TIME: 09:40:40

Input Set : N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

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211       cagacttcgc ccttccttc                                      19
213 <210> SEQ ID NO: 21
214 <211> LENGTH: 21
215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: oligonucleotide
219 <400> SEQUENCE: 21
220       tcaattcact ccctgtgttc c                                   21
222 <210> SEQ ID NO: 22
223 <211> LENGTH: 20
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: oligonucleotide
228 <400> SEQUENCE: 22
229       ctggaaagag gagccttgtg                                     20
231 <210> SEQ ID NO: 23
232 <211> LENGTH: 20
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: oligonucleotide
237 <400> SEQUENCE: 23
238       ctgagacgga aaggaacagc                                     20
240 <210> SEQ ID NO: 24
241 <211> LENGTH: 19
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: oligonucleotide
246 <400> SEQUENCE: 24
247       agaggatgcg cacagtcac                                      19
249 <210> SEQ ID NO: 25
250 <211> LENGTH: 20
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: oligonucleotide
255 <400> SEQUENCE: 25
256       tgatgggaaa gaggttctgg                                     20
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259 <211> LENGTH: 20
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
263 <223> OTHER INFORMATION: oligonucleotide
264 <400> SEQUENCE: 26
265       cgttctgggc taggagtctg                                     20
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/02/2002
PATENT APPLICATION: US/10/019,906A   TIME: 09:40:41

Input Set : N:\Crf4\09232002\J019906.raw
Output Set: N:\CRF4\10022002\J019906A.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 38
Seq#:4; N Pos. 21,22,23,24,25
Seq#:5; N Pos. 21,22,23,24,25
Seq#:6; N Pos. 21,22,23,24,25
Seq#:7; N Pos. 21,22,23,24,25
Seq#:42; N Pos. 54
Seq#:43; N Pos. 29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45
Seq#:44; N Pos. 67
Seq#:45; N Pos. 78
Seq#:46; N Pos. 68
Seq#:47; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67
Seq#:48; N Pos. 67
Seq#:49; N Pos. 38
Seq#:50; N Pos. 68

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 3

VERIFICATION SUMMARY   DATE: 10/02/2002
PATENT APPLICATION: US/10/019,906A   TIME: 09:40:41

Input Set : **N:\Crf4\09232002\J019906.raw**
Output Set: **N:\CRF4\10022002\J019906A.raw**

```
L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:440 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:60
L:454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:60
L:468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:60
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:60
L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60
L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60
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